

CLAIMS:**What is claimed is:**

1 1. A method within an electronic device for
2 communicating within a network of localized electronic
3 devices, wherein said method comprises the steps of:

4 processing incoming and outgoing vibration wave
5 messages in accordance with a network protocol; and

6 decoding a message-specific semantic of an incoming
7 vibration wave message and encoding a message-specific
8 semantic of an outgoing vibration wave message, such that
9 said device may correspond in accordance with device-
10 specific and message specific limitations.

1 2. The method of claim 1, wherein said processing step
2 further comprises the steps of:

3 decoding said incoming vibration wave message; and
4 encoding said outgoing vibration wave message in
5 accordance with said network protocol.

1 3. The method of claim 1, further comprising the step of
2 receiving and translating said incoming vibration wave
3 message into a digitized electronic signal.

1 4. The method of claim 3, wherein all network messages
2 include a control message, and wherein said method further
3 comprises the steps of:

1 reading said digitized electronic signal to identify
2 said control message;

3 terminating said digitized electronic signal in
4 response to failing to identify said control message; and

5 processing said digitized electronic signal in
6 response to identifying said control message.

1 5. The method of claim 2, wherein said encoding step is
2 followed by the step of generating and transmitting an
3 outgoing vibration wave message in accordance with said
4 network protocol.
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1 6. The method of claim 5, wherein said generating and
2 transmitting step further comprises the steps of:

1 3 translating a digital signal from said protocol
2 4 interface macro into an analog signal; and
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6 7 converting said translated analog signal into an
7 outgoing vibration wave message.

1 7. The method of claim 1, wherein said device includes a
2 base media interface having an vibration signal table
3 which stores a plurality of predetermined vibration wave
4 signals, and wherein method further comprises encoding
5 said outgoing vibration wave message utilizing at least
6 one of said plurality of predetermined vibration wave
7 signals within said vibration signal table.

1 8. An electronic device comprising:

2 a base media interface within each of said plurality
3 of devices for processing incoming and outgoing vibration
4 wave messages in accordance with a network protocol; and

5 a device-specific logic in communication with said
6 base media interface for decoding a message-specific
7 semantic of an incoming vibration wave message and
8 encoding a message-specific semantic of an outgoing
9 vibration wave message, such that each of said plurality
10 of devices may correspond in accordance with device-
11 specific and message specific limitations.

1 9. The communication interface of claim 8, wherein said
2 base media interface comprises a protocol interface macro
3 for decoding said incoming vibration wave message and
4 encoding said outgoing vibration wave message in
5 accordance with said network protocol.

1 10. The communication interface of claim 9, wherein said
2 base media interface further comprises a transducer for
3 receiving and translating said incoming vibration wave
4 message into an electronic signal.

1 11. The communication interface of claim 10, wherein said
2 base media interface further comprises an analog-to-
3 digital converter for digitizing said electronic signal.

1 12. The communication interface of claim 9, wherein said
2 base media interface further comprises a vibration encoder
3 in communication with said protocol interface macro for

generating and transmitting an outgoing vibration wave message in accordance with said network protocol.

1 13. The communication interface of claim 12, wherein said
2 vibration encoder comprises:

3 a digital-to-analog converter for converting a
4 vibration-encoded digital signal from said protocol
5 interface macro into an vibration-encoded analog signal;
6 and

70 a speaker for translating said vibration-encoded
80 analog signal into an outgoing vibration wave message.

14. The communication interface of claim 8, wherein said
base media interface includes a message table which stores
a plurality of predetermined vibration wave signals.

15. The communication interface of claim 14, wherein said
device-specific logic encodes said outgoing vibration wave
message utilizing at least one of said plurality of
predetermined vibration wave signals within said vibration
signal table.

1 16. The communication interface of claim 14, wherein said
2 base media interface further comprises computer processing
3 means that provides interactive processing among said
4 protocol interface macro, said vibration signal table, and
5 said device-specific logic.

1 17. The communication interface of claim 16, further
2 comprising a non-vibration feedback source in

1 communication with said computer processing means for
2 providing external non-vibration feedback control of said
3 outgoing vibration wave message.

1 18. A method for processing a communication message with
2 another device, said method comprising the steps of:

3 transducing an incoming vibration signal into an
4 incoming electronic signal;

5 decoding said incoming electronic signal to determine
6 whether said incoming vibration signal is a network
7 message;

8 responsive to a determination that said incoming
9 vibration signal is not a network message, terminating
10 said incoming electronic signal;

11 responsive to a determination that said incoming
12 vibration signal is an incoming network message,
13 determining whether said incoming network message has been
14 previously received by said host device;

15 responsive to a determination that said incoming
16 vibration signal has been previously received by said host
17 device, terminating said incoming network message; and

18 responsive to a determination that said incoming
19 vibration signal has not been previously received by said
20 host device, transmitting said incoming network message as
21 an outgoing vibration message.

1 19. The method of claim 18, further comprising the steps
2 of decoding a semantic of said incoming network message
3 into a device-specific command in accordance with a

1 device-specific decoder and device-specific instructions
2 stored within said device-specific logic module.